



Interim Forest Management Plan

Property Identifiers

Property Name: **Brillion Marsh Wildlife Area (WA)**

Property Designation or Type **State Wildlife Area, Fee Title**

DNR Property Code(s) (DNR Prop Code Number): **0821**

Forestry Property Code(s): **821**

Property Location - County(ies): **Calumet**

Property Acreage: **4,800**

Master Plan Date: **July 1979**

Property Manager: **Steve Easterly**

Property Assessment

The following should be considered during the property assessment:

A. Ecological Landscape description and property context

Brillion Marsh WA lies within the Central Lake Michigan Coastal Ecological Landscape area. A majority of the natural vegetation remaining in the western part of the landscape is associated with the Wolf River floodplain. Significant acreages of lowland hardwood forest, shrub swamp and marsh are present, along with smaller amounts of sedge meadow and mesic hardwood forest. The entire floodplain of the Wolf River merits protection, as almost everything around it is now heavily developed. Similarly, the only extensive areas of natural vegetation in the eastern part of the landscape are several isolated but large wetlands in southern Door and Kewaunee counties and at several other locations to the south and west. Most of these wetlands are forested, with stands of swamp hardwoods, white cedar, tamarack and floodplain forest. Much of this land is in multiple private ownerships, with relatively few large tracts. There is a need to conduct field surveys to identify sites that offer the best opportunities for management and protection partnerships.

Lake Michigan is used heavily by waterfowl and other water birds, and its shoreline is important for migratory birds of many kinds, including waterfowl, loons, grebes, gulls, terns, shorebirds, raptors and passerines. Providing or maintaining habitat for nesting, migratory and wintering birds along and near Lake Michigan and Green Bay are important conservation goals. Management opportunities include maintaining and restoring the integrity of locations on Lake Michigan and its shoreline that receive heavy bird use, as well as reforesting open locations along the shoreline for use as migratory stopover sites for land birds. There is also a need to provide stopover habitats at inland locations.



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B. General property description

Brillion Marsh WA is 4,800-acre property consisting of bottomland hardwoods, prairie, emergent marsh, wetland pockets and brood ponds, some upland hardwoods and agricultural fields. In 1947, the Department leased portions of the site as a public hunting ground for ducks, deer and other wildlife. The area was known for its abundant wealth of ducks during the hunting season and deer during the winter. By 1962, a formal proposal was made to acquire lands within the current boundary structure. The Calumet County board, the Natural Resources Board and others approved of the project by the end of 1962. In 1963, formal acquisition began leading up to the acquisition of the current nature center site and all total about 5,000 acres of land lying within the Brillion Wildlife Area project boundary

C. Current forest types, size classes and successional stages

Forest Type	# of Stands	Acres	Acres by Age Class								No SI	Totals
			0-30	31-40	41-50	51-60	61-70	71-80	81-90	91+		
Aspen	8	94		2	6	45	39		2			94
Bottomland Hardwood	29	815				37	262	240	230		46	815
Central Hardwoods	4	36				18	13	5				36
Misc. Conifers	1	1					1					1
Northern Hardwoods	4	46		5		7					5	17
Oak	4	34			1	2	31					34
	50	1026	0	7	7	109	346	245	232	0	51	997

D. NHI:

There is one state endangered species, one federally protected species, three species of special concern, the area is also listed for hibernaculum for snakes and amphibians as well as a migratory bird concentration site.

E. Wildlife Action Plan Conservation Opportunity Areas (COA), **None**

F. Significant cultural or archeological features

Both archaeological and historical sites exist on and adjacent to the property. State archeologists will be contacted for review of the timber sale and related projects prior to any activity.

G. Invasive species

The Brillion Marsh Wildlife Area as with other state properties in the area have numerous invasive species present. Exotic and hybrid *typha spp.*, exotic Phragmites (*Phragmites australis*), garlic mustard (*Alliaria petiolate*), common and glossy buckthorn (*Rhamnus cathartica* and *Frangula alnus*) respectively, and wild parsnip (*Pastinaca sativa*) are the main species impacting the site and property.



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H. Existing State Natural Areas (SNA) designations/natural community types limited in the landscape

There are no SNA's associated with the Brillion WA.

I. Primary public uses (recreation)

The Brillion Wildlife Area offers many recreational opportunities.

- Birding
- Cross country skiing (on Brillion Nature Center Trails but not groomed)
- Canoeing - Manitowoc River
- Dog training and trialing site
- Hiking (no designated trail)
- Hunting - especially noted for deer, waterfowl, mourning doves (in natural habitat and harvested winter wheat fields), pheasant and turkey. Note special closed area (40 acres) at Nature Center except during deer-gun season
- Snowmobiling trail
- Trapping
- Wild edibles/gathering
- Wildlife viewing

J. Biotic Inventory Status

Rapid Ecological Assessment for the Eastern Lake Winnebago Wildlife Areas

K. Deferral/consultation area designations

None



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IFMP components

Management Objectives: (Outline primary forest management objectives):

Aspen

The primary objective is to regenerate this type to the extent possible for the benefit of game and nongame wildlife. Additional objectives include increasing age class diversity, expanding aspen acreage where opportunities exist, and leaving selected reserve trees as appropriate.

Oak & Northern Hardwoods

The primary objective for this type is to maintain and/or regenerate stands to enhance wildlife values, with timber production as a secondary objective. Depending on quality and species composition, objectives may include uneven-age and even-age management. The management objective for the oak stand is long-term maintenance with emphasis on regeneration.

Central Hardwoods

Similar to the oak and northern hardwoods, the main objective will be to regenerate stands to enhance wildlife Value, through appropriate silviculture practices.

Bottomland Hardwoods

The goal in the bottomland hardwood area will be to maintain the diversity of bottomland species while promoting a variety of size classes. Ash should be selectively removed to mitigate the impacts of EAB.

Miscellaneous Coniferous

There are pockets of coniferous tree species on the property which will remain providing for a variety of tree species with in the varying stands, as well as for potential winter cover for wildlife. At the point when timber harvest is scheduled for stands surround these species they will be re-evaluated at that time.

Property Prescriptions (Identify specific and pertinent prescriptions by area or forest type, including passive management areas, extended rotation, and other information that will help achieve the objectives)

Aspen

The objective for this stand is to regenerate and retain the aspen component for the next 50 years by coppicing; salvage the ash and other “high-risk” hardwood trees. “Leave trees” within the clear-cut areas will be marked, and will consist of snag and den trees, any oak trees and some maple. There is also a fair amount of mortality in the aspen as well as windfall due to the shallow root systems and high-water table. Other species mixed with the aspen trees include: ash (black and green); American elm (mostly dead from Dutch elm disease); soft maple; basswood and at least one bur oak.



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Oak and Northern Hardwoods Central Hardwoods

Where uneven-age management is appropriate, selection harvests will be designed to improve stand quality by removing poor quality trees and releasing crop trees. Canopy gaps will be included to enhance regeneration of various species. Oak stands will be thinned to increase volume, improve quality, and maintain this important type. At rotation age, a shelter wood harvest will be used to regenerate the stand.

Bottomland hardwoods

The objective for these stands is to create a diversity of tree species to lessen the adverse effects of future insect and disease issues; and to also enhance the area for wildlife. A diversity of plant species attracts a greater diversity of animal species. The marking strategy will select against (salvage) ash and elm due to emerald ash borer and Dutch elm disease; release crop trees (mostly maple and any oak); salvage other high-risk trees; and retain all snag and den trees. Where Reed Canary Grass (RCG) is present and dense care will be taken and more of a select cut will be recommended to prevent RCG from crowding out desired regrowth of the tree species.

Miscellaneous Coniferous

As stated above some of the conifers on the property will be left to provide a wider variety of tree species, as well as providing for winter cover for wildlife. Stands will be evaluated when timber sales are scheduled for surrounding hardwood stands.

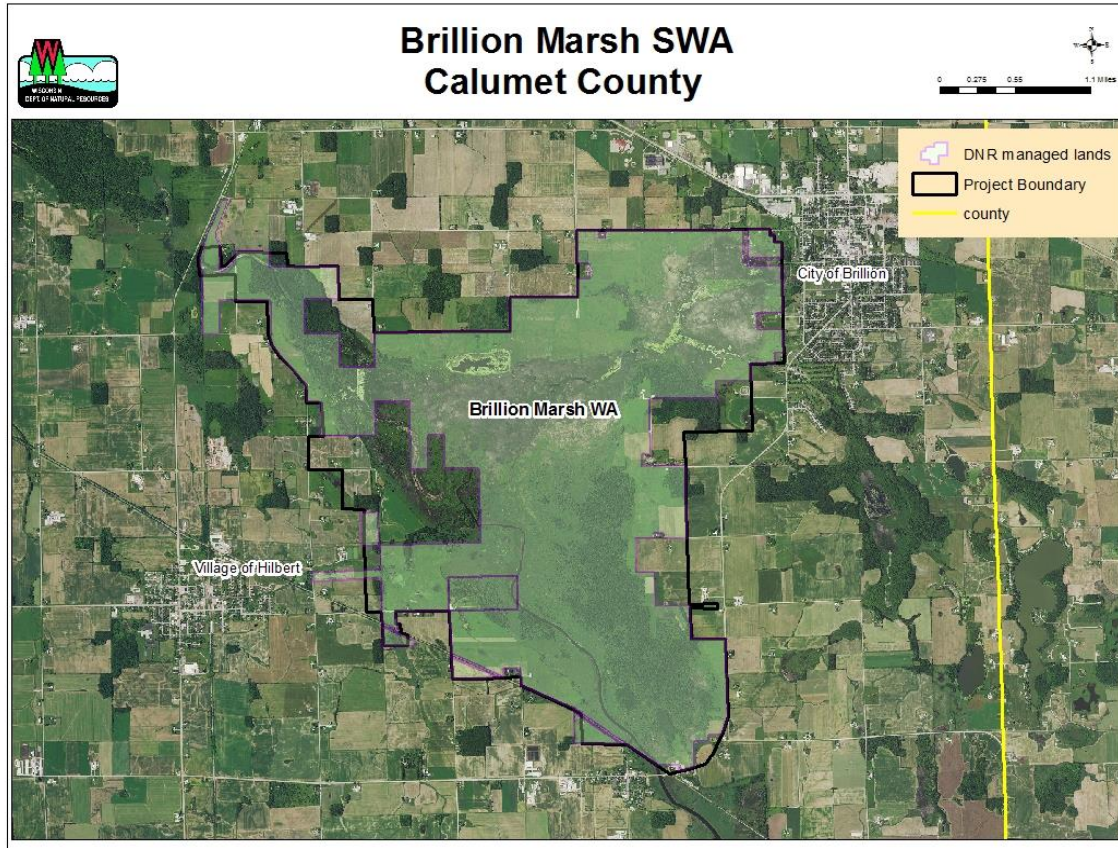
Summary of Public Involvement and Comments Received



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Maps (Optional)

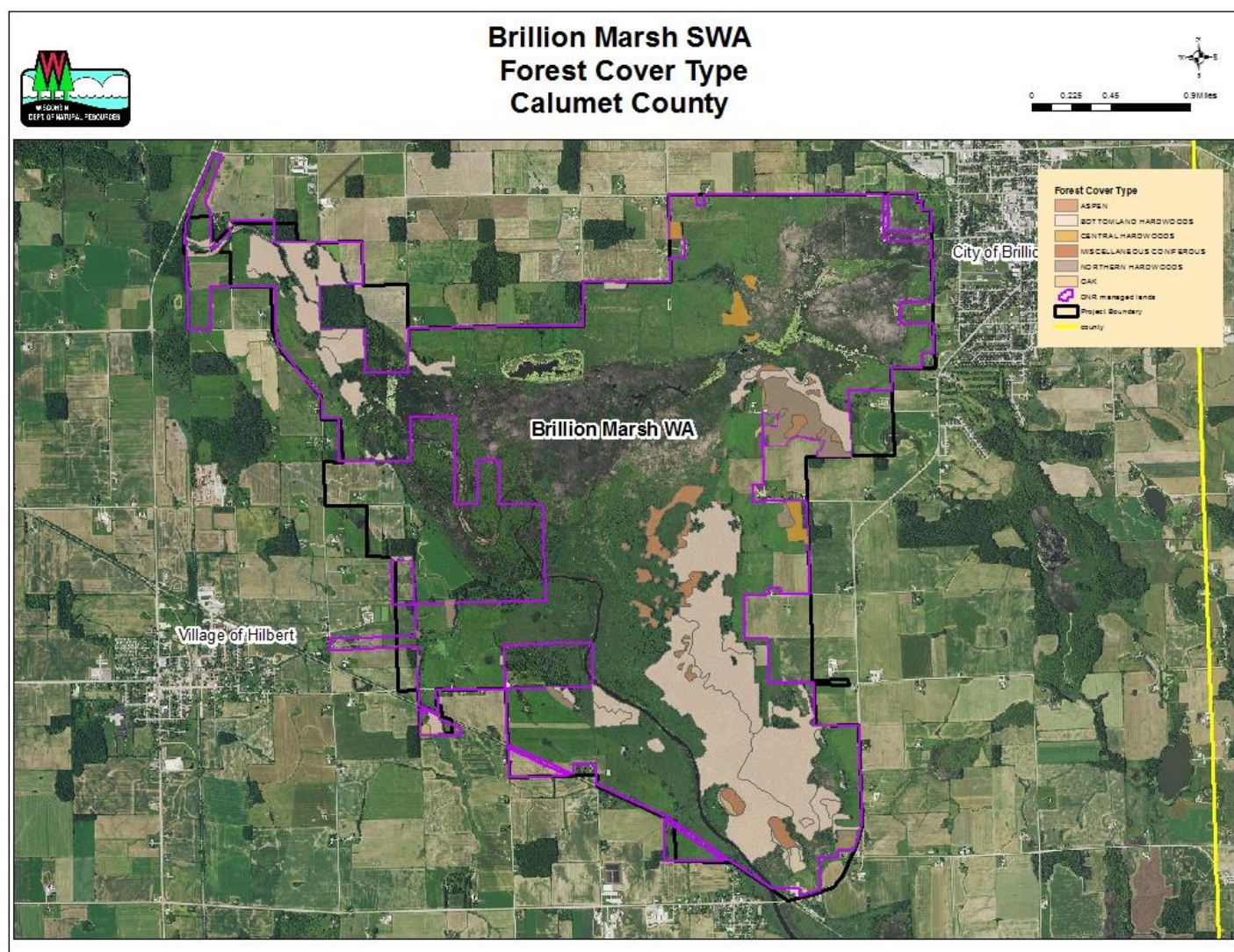
a. Property Boundary and ownership Maps





Interim Forest Management Plan

b. Forest Cover Type Maps





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PREPARED BY:

Property Manager Date

APPROVED:

Area Program Supervisor Date

REVIEWED BY:

Forester Date

District Ecologist Date